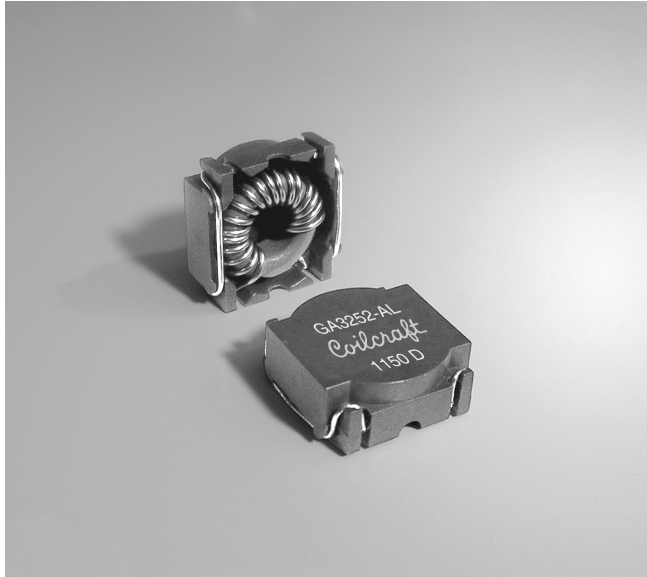




Power Inductor – GA3252-AL

For National Semiconductor
LM3433 LED Driver



- High current surface mount toroidal power inductor
- Specified by National Semiconductor for 2 A to 14 A output applications

Core material Ferrite

Terminations RoHS compliant tin-silver (96.5/3.5) over copper. Other terminations available at additional cost.

Weight 11.6 g

Ambient temperature –40°C to +85°C with Irms current, +85°C to +125°C with derated current

Storage temperature Component: –40°C to +85°C.
Tape and reel packaging: –40°C to +80°C

Resistance to soldering heat Max three 40 second reflows at +260°C, parts cooled to room temperature between cycles

Moisture Sensitivity Level (MSL) 1 (unlimited floor life at <30°C / 85% relative humidity)

Mean Time Between Failures (MTBF) 26,315,789 hours

Packaging 200 per 13" reel Plastic tape: 44 mm wide, 0.5 mm thick, 32 mm pocket spacing, 10.4 mm pocket depth

PCB washing Only pure water or alcohol recommended

Part number ¹	Inductance ² ±20% (µH)	DCR max ³ (Ohms)	SRF typ ⁴ (MHz)	Isat (A) ⁵			Irms (A) ⁶	
				10% drop	20% drop	30% drop	20°C rise	40°C rise
GA3252-AL_	12.0	0.017	20	6.5	8.0	13	6.5	10

1. When ordering, specify **termination** and **packaging** codes:

GA3252-ALD

Termination: L = RoHS compliant tin-silver over copper.

Special order:

T = RoHS tin-silver-copper (95.5/4/0.5) or

S = non-RoHS tin-lead (63/37).

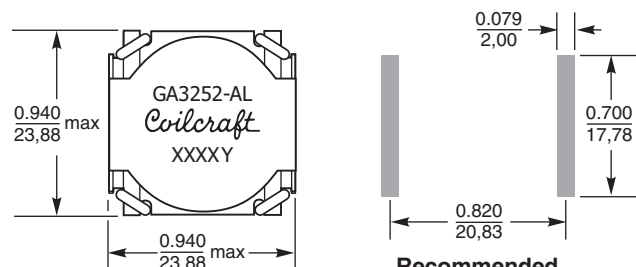
Packaging: D = 13" machine-ready reel

EIA-481 embossed plastic tape (200 per full reel).

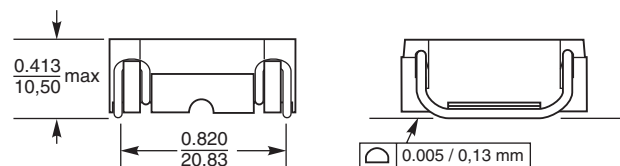
B = Less than full reel

In tape, but not machine ready. To have a leader and trailer added (\$25 charge), use code letter D instead.

- Inductance tested at 100 kHz, 0.1 Vrms on Agilent/HP 4192A.
 - DCR measured on a Keithley 580 micro-ohmmeter or equivalent.
 - SRF measured on an Agilent/HP 8753ES network analyzer.
 - DC current at which the inductance drops the specified amount from its value without current.
 - Current that causes the specified temperature rise from 25°C ambient.
 - Electrical specifications at 25°C.
- Refer to Doc 362 "Soldering Surface Mount Components" before soldering.



Parts manufactured prior to December 2011 may be marked differently.

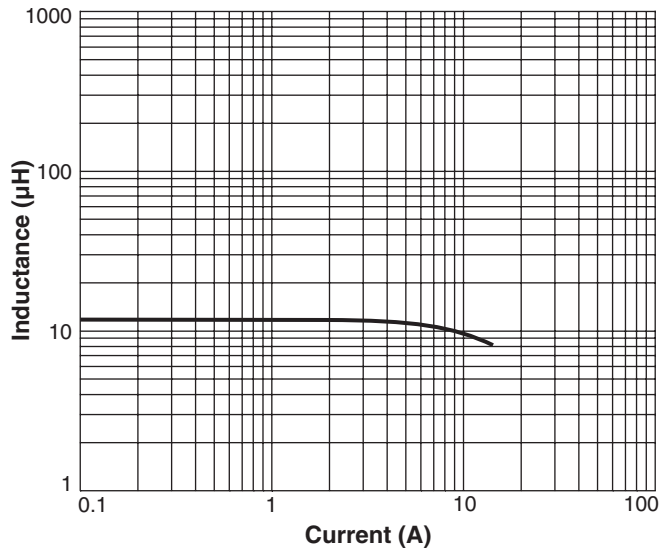


Dimensions are in $\frac{\text{inches}}{\text{mm}}$

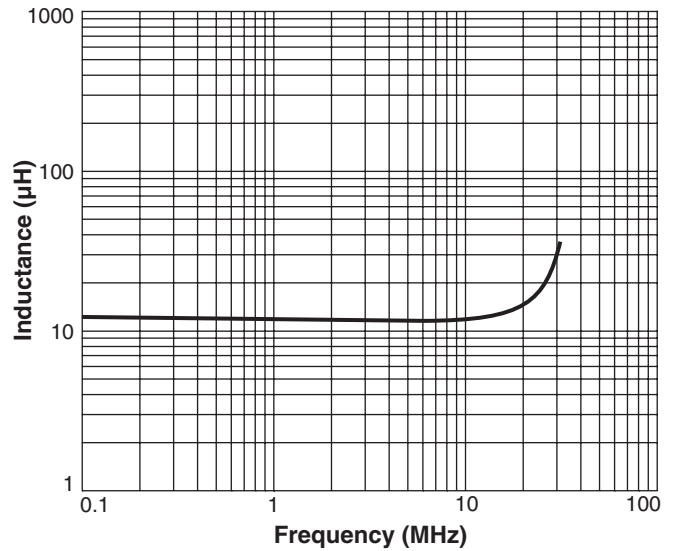


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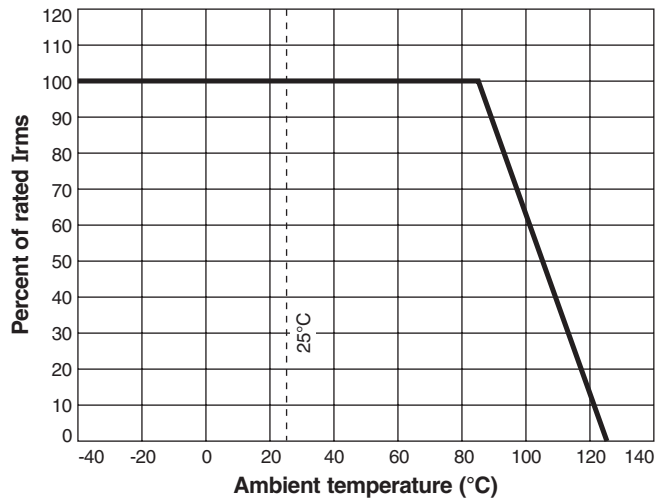
L vs Current



L vs Frequency



Irms Derating



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